



APPENDIX Q

CORPUS CHRISTI RTA TRANSIT ASSET MANAGEMENT PLAN

TRANSIT ASSET MANAGEMENT PLAN



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Corpus Christi Regional Transportation Authority

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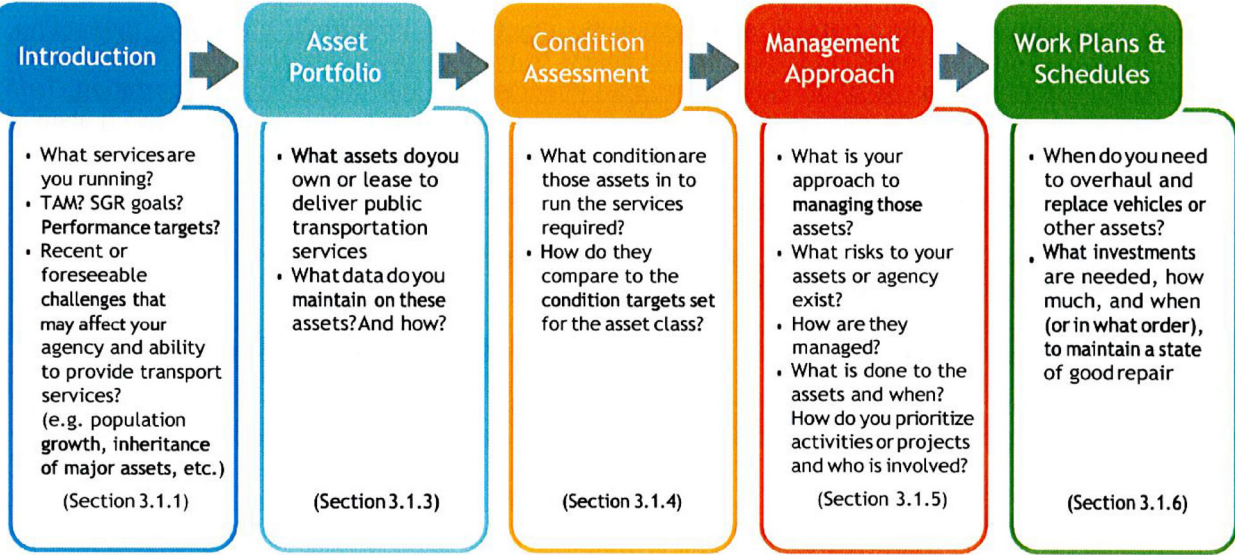
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Transit Asset Management Plans

This section provides a suggested structure for a TAM plan, aligned to Federal requirements and industry best practice. Ultimately, the TAM Plan will provide an umbrella for bringing together current maintenance and related practices and ensuring an integrated whole-life perspective is applied moving forward. It can address any gaps in current procedures and/or identify opportunities for improvement. Key questions and examples from other transit properties also are included throughout this section to further enhance development and implementation of your plan.

The purpose of a TAM Plan is to specify the activities (maintenance, overhaul/ renewal, replacement, etc.), resources, and timescales required for a group of assets to achieve the agency's service and asset management objectives. To put it simply, a TAM Plan is a living, single source of information to help you better manage your assets to deliver your target service through the core TAM Plan elements shown in Figure 1-1.

Figure 1-1




Mike Rendon
Acting Chief Executive Officer

Date 11-16-22

CHAPTER 1 – INTRODUCTION

TAM Vision

The purpose of developing the Corpus Christi Regional Transportation Authority (CCRTA) TAM Plan is to aid CCRTA in achieving and maintaining a state of good repair (SGR) of all public transportation assets in the CCRTA Service area. **SGR is the condition in which a capital asset is able to operate at a full level of performance.** This means that the asset:

1. Is able to perform its designed function,
2. Does not pose a known unacceptable safety risk, and
3. Its lifecycle investments have been met or recovered.

TAM and SGR Policy

Moving Ahead for Progress in the 21st Century Act (MAP-21) required the Secretary to develop rules to establish a system to monitor and manage public transportation assets to improve safety and increase reliability and performance, and to establish performance measures. The Fixing America's Surface Transportation (FAST) Act reaffirmed this requirement. On July 26, 2016, FTA published the Transit Asset Management (TAM) Final Rule.

Transit Asset Management is the strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their performance, risk, and costs over their life cycles for the purpose of providing safe, cost-effective, and reliable public transportation. TAM uses transit condition to guide how to manage capital assets and prioritize funding to improve or maintain a state of good repair.

The Final Rule groups providers into two categories: Tier I and Tier II.

- Tier I providers own, operate, or manage: rail, more than 100 vehicles across all fixed-route modes, or more than 100 vehicles in one non-fixed route mode.
- Tier II providers are subrecipients of 5311 funds, or an American Indian Tribe, or own, operate, or manage less than 101 vehicles across all fixed route modes, or less than 101 vehicles in one non-fixed route mode.

The TAM rule requires every transit provider that receives federal financial assistance under 49 U.S.C. Chapter 53 to develop a TAM plan or be a part of a group TAM plan prepared by a sponsor (CCRTA). All TAM plans must contain:

- An inventory of assets
- A condition assessment of inventoried assets
- Documentation of the use of a decision support tool
- A prioritization of investments

Tier II providers may develop their own plans or participate in a group plan such as CCRTA's TAM Plan. Regardless of whether an agency develops its own TAM Plan or chooses to participate in a group plan, each transit agency must designate an Accountable Executive to ensure that the necessary resources are available.

It is the expectation of CCRTA to have the support and feedback of the Metropolitan Planning Organizations (MPO) to define, implement, enhance and achieve the goals of the CCRTA TAM Plan. An Accountable Executive is a singled, identifiable individual within a transit agency who has direct control over the resources needed to implement an agency's safety plan and transit asset management practices, and who responsible for the implementation of both of those requirements.

CCRTA TAM Plan will be updated in its entirety, at minimum, every four years.

Corpus Christi Regional Transportation Authority (CCRTA)

CCRTA is committed to fostering a safe, mobility focused public transportation program throughout the service area that promotes economic growth and opportunity for all of CCRTA's travelers. Public transportation is a vital part of the

Transit Asset Management Plan

service area in Nueces County. It is a transportation option that relieves congestion, helps maximize capacity on roadways, improves air quality, reduces fuel consumption and connects people of all ages and abilities with their surrounding communities. Maintaining a transit fleet in a state of good repair is critical to providing a safe, reliable and comfortable environment for operators and the traveling public.

Public transportation providers range in size and scale from daily fixed route services to demand response services; with schedules and destinations determined on a day-to-day basis. These organizations assist the elderly, those with disabilities, youth, the general public, and low income citizens to gain access to needed medical, nutrition, education, employment, social, and commercial services.

Performance Targets & Measures

When determining performance targets and measures it is most important to first identify what factors are taken into account and what that data entails. CCRTA utilizes the following data when determining performance targets and measures:

- Useful Life
- Asset Age
- Vehicle Mileage/Age
- Asset Condition
- Useful Life Benchmark (ULB)

Useful life is the expected lifetime of project property, or the acceptable period of use in service. Useful life of revenue rolling stock begins on the date the vehicle is placed in revenue service and continues until it is removed from service. CCRTA utilizes the Federal Transit Administration's (FTA) standards for determining useful life, reflected in the table below:

Vehicle	Seats	Useful Life
Heavy Duty Large Bus (35' to 40' and articulated buses) Approx. 33,000 to 40,000 GVW	27 to 40	12 years or 500,000 miles
Heavy-Duty Small Bus (30' to 35') Approx. 26,000 to 33,000 GVW	26 to 35	10 years or 350,000 miles
Medium-Duty and Purpose-Built Bus (25' to 35') Approx. 16,000 to 26,000 GVW	22 to 30	7 years or 200,000 miles
Light-Duty Mid-Sized Buses (25' to 35') Approx. 10,000 to 16,000 GVW	16 to 25	5 years or 150,000 miles
Light-Duty Small Bus, Cutaways, Regular & Modified Van (16' to 28') Approx. 6,000 to 14,000 GVW	10 to 22	4 years or 100,000 miles

Minimal Asset Useful Life Standards for FTA Grants

Asset	Useful Life	Source
Buses/Light Vehicles		
Large heavy-duty transit buses 35'-40'	12 yrs/ 500,000 miles	FTA Circular 5010.1D
Small heavy-duty transit buses 30'	10 years/ 350,000 miles	FTA Circular 5010.1D
Medium medium-duty transit buses 25'-35'; Sprinter bus	7 years/ 200,000 miles	FTA Circular 5010.1D
Medium light-duty transit buses 25'-35', BOC vehicles, Expansion vans	5 years/ 150,000 miles	FTA Circular 5010.1D
Light-duty vehicles (vans, sedans, light-duty buses); Support vehicles; BOC (15-19 passenger), < 30 ft	4 years/ 100,000 miles	FTA Circular 5010.1D
Trolleys		
Fixed guideway steel-wheeled	25 years	FTA Circular 5010.1D

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Fixed guideway electric, rubber tires	15 years	FTA Circular 5010.1D
Simulated trolleys (rubber tires, internal combustion engine)	Refer to bus useful life 25 years, see circular	FTA Circular 5010.1D FTA Circular 5010.1D

Rail Vehicles

Ferries

Passenger ferries	25 years	FTA Circular 5010.1D
Other ferries (w/o refurbishment)	30 years	FTA Circular 5010.1D
Other ferries (w/refurbishment)	60 years	FTA Circular 5010.1D

Facilities

Buildings- concrete, steel and frame construction	40 years	FTA Circular 5010.1D
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Other Capital Equipment

Fare boxes	10 years	Manufacturer/Industry Stds.
Computer hardware	4 years	GAAP Guidelines/Industry Stds.
Computer hardware- Domain controllers	4 years	Industry Stds.
Mobile data computers (real-time dispatching)	7 years	Manufacturer
Computer software	4 years	GAAP Guidelines/Industry Stds.
Computer software- HASTUS	4 years	Manufacturer
Computer software- ADP	4 years	Industry Stds.
Scheduling/fleet management software	4 years	GAAP Guidelines/Industry Stds.
Communications equipment, mobile radios, base stations	10 years	GAAP Guidelines/Industry Stds.
Security/Surveillance equipment, cameras for vehicles	Same as useful life of vehicle	
Security/Surveillance equipment, cameras for buildings	10 years	Industry Stds.
Shop equipment- Alignment machines, bus washing, tire changers	10 years	Manufacturer
Bus lift	20 years	Manufacturer
Wheelchair lift	Same as useful life of vehicle	
Bus shelters	15 years	Industry Stds.
Bus shelter/stop benches	10 years	Manufacturer
Office furniture	10 years	Manufacturer
Carpeting	5 years	Manufacturer
Repeater tower	25 years	Manufacturer
Engine for bus/trolley	4 years	Industry Stds.
Bus stop signage	10 years	Industry Stds.
HVAC parts	5 years	Grantee experience
Asphalt parking lot	15 years	GASB Manufacturer
Thermal diesel particle filter cleaner	10 years	
Commercial roofing	15 years	Industry Stds.



FEDERAL TRANSIT ADMINISTRATION

Default Useful Life Benchmark (ULB) Cheat Sheet

Sources: NTD Reporting Manual

Transit Agencies must report the age of all vehicles to the National Transit Database. FTA tracks the performance of revenue vehicles (Rolling Stock) and non-revenue service vehicles (Equipment), by asset class, by calculating the percentage of vehicles that have met or exceeded the useful life benchmark (ULB).

FTA has set a default ULB as the expected service years for each vehicle class in the table below. ULB is the average number of years at which a vehicle would reach a 2.5 rating on the FTA Transit Economic Requirements Model (TERM) scale, assuming a standard maintenance schedule. When entering fleet data in the NTD, Transit Agencies have the option to either use the pre-populated default ULB or submit an adjusted ULB based on differences in operating environment and/or agency maintenance practices. In cases where the submitted ULB differs significantly from the default value, agencies may be prompted to submit justification.

Vehicle Type	Default ULB (in years)
AB Articulated bus	14
AG Automated guideway vehicle	31
AO Automobile	8
BR Over-the-road bus	14
BU Bus	14
CC Cable car	112
CU Cutaway bus	10
DB Double decked bus	14
FB Ferryboat	42
HR Heavy rail passenger car	31
IP Inclined plane vehicle	56
LR Light rail vehicle	31
MO Monorail vehicle	31
MV Minivan	8
RL Commuter rail locomotive	39
RP Commuter rail passenger coach	39
RS Commuter rail self-propelled passenger car	39
SB School bus	14
Steel wheel vehicles	25
SR Streetcar	31
SV Sport utility vehicle	8
TB Trolleybus	13
Trucks and other rubber tire vehicles	14
TR Aerial tramway	12
VN Van	8
VT Vintage trolley	58



FEDERAL TRANSIT ADMINISTRATION

Facilities and Stations

Stations	Term Rating	Completion Year	Age	Useful Life	Useful Life %
Staples Street Station	5	2016	6	40	85.00%
Robstown Station	4	2014	8	40	80.00%
Southside Station	3	2003	19	40	52.50%
Port/Ayers Station	2	1996	26	15	0.00%
Units	4		14.75	Avg Age	
Units < 3	1.00				
% < 3	25.00%				
Parking					
Bus - Bear Lane	5	2021	1	20	95.00%
Employees - Bear Lane	4	2015	7	20	65.00%
Staples Street Center Lot	4	2016	6	20	70.00%
Staples Street Center Off site	4	2017	5	20	75.00%
Units	4		4.75	Avg Age	
Units < 3	0				
% < 3	0.00%				
Buildings					
Staples Street Center	5	2016	6	40	85.00%
			6	Avg Age	
Maintenance					
Operations Center	3	2002	20	40	62.50%
Maintenance Shop	4	2010	12	40	82.50%
Fuel Island	3	1996	26	40	47.50%
Bus Wash	3	1996	26	40	47.50%
total units	5		18	Avg Age	
Units < 3	0				
% < 3	0.00%				

Additionally, asset conditions are determined based off the FTA's Transit Economic Requirements Model (TERM) as outlined below:

Condition	Description	Mileage	Rating
Excellent	New asset; no visible defects		4.8-5.0
Good	Asset showing minimal signs of wear; some (slightly) defective or deteriorated component(s) but is overall functional		4.0-4.7
Adequate	Asset has reached its mid-life; some moderately defective or deteriorated component(s)	50%-99% of Useful Life	3.0-3.9
Marginal	Asset reaching or just past the end of its useful life; increasing number of defective or deteriorated component(s) and increasing maintenance needs	100%-124% of Useful Life	2.0-2.9
Poor	Asset is past its useful life and is in need of immediate repair or replacement; may have critically damaged component(s)	125% or more of Useful Life	1.0-1.9

The FTA defines a useful life benchmark (ULB) as the expected lifecycle of a capital asset for a particular transit provider's operating environment or the acceptable period of use in service for a particular transit provider's operating environment. ULB is not the same as an asset's useful life. ULB takes into account a provider's unique operating environment such as geography, service frequency, etc.

Vehicle Type	FTA Default ULB (in years)
Automobile (AO)	8
Bus (BU)	14
Cutaway Bus (CU)	10
Minivan (MV)	8
Sport Utility Vehicle (SV)	8
Van (VN)	8

Rolling Stock – Useful Life Benchmark

Vehicle Class	ULB (Years)	# of Units (12/31/21)	Number of Units Beyond ULB in 2021	Number of Units Beyond ULB in 2022	FY2022 Baseline Target % at or Beyond ULB
Bus/Trolleys	14/13	65	0	4	6.00%
Cutaways	8	57	0	0	0.00%
Total		122	0	0	0.00%

TAM Goals and/or Objectives (Targets)

Goal 1: Keep the CCRTA revenue vehicle average condition rating at or above a “Adequate” rating by the end of FFY 2022 and 2023:

- Dispose of vehicles that pose an irreparable unacceptable safety risk
- Prioritize the replacement of vehicles based on age or miles
- Continue with the regular Preventive/Predictive Maintenance Inspection Program
- Continue to explore Risk Management Strategies

Goal 2: Prioritize the replacement of the vehicles based on their useful life

- Prioritize the replacement of vehicles that have exceeded their ULB
- Preventive Maintenance Strategies to extend ULB

About the TAM Plan

The TAM Plan contains four major components; the Asset Portfolio, the Condition Assessment, the Management Approach, as well as the Work Plans and Resources section. The Asset Portfolio provides a list of all of the capital assets that support the delivery of public transportation services in Texas. The Condition Assessment section includes the current condition that the capital assets are in and how the actual conditions compare to the targets set for each asset category. The Management Approach breaks out the information supporting the decision making process, investment prioritization, risk management considerations, and strategies for maintenance, overhaul, disposal, acquisition, and renewal. The Work Plans and Schedule section outlines the proposed investments and any applicable capital investment activity schedules.

This document covers the data compiled during the CCRTA's FY 2021 and 2022. In compliance with 49 CFR 625 each transit provider must designate an Accountable Executive who will have the authority of approving and implementing the TAM plan.

Roles and Responsibilities

Role	Title	Agency
Accountable Executive	Chief Executive Officer (Jorge Cruz-Aedo)	Corpus Christi Regional Transportation Authority
Asset Management Executive Lead	Managing Director of Capital Projects and Customer Services (Sharon Montez)	Corpus Christi Regional Transportation Authority
Asset Management Executive	Managing Director of Administration (Robert Saldana)	Corpus Christi Regional Transportation Authority
Asset Management Executive	Managing Director of Operations (Derrick Majchszak)	Corpus Christi Regional Transportation Authority
Project Manager – Maintenance/Rolling Stock/Non-Revenue Vehicles	Director of Maintenance (Bryan Garner)	Corpus Christi Regional Transportation Authority
Project Manager – Technology/Security Cameras	Director of IT (David Chapa)	Corpus Christi Regional Transportation Authority
Project Manager – Construction/Shelter Equip/Fac. Equipment	Managing Director of Capital Projects and Customer Services (Sharon Montez)	Corpus Christi Regional Transportation Authority
Project Manager – Safety & Security	Managing Director of Legislative Affairs & Safety and Security (Mike Rendon)	Corpus Christi Regional Transportation Authority
Transit Asset Team Member	Grants (Christina Perez)	Corpus Christi Regional Transportation Authority
Transit Asset Team Member	Director of Procurement (Christina Perez)	Corpus Christi Regional Transportation Authority
Transit Asset Team Member	Director of Finance (Sandy Roddel)	Corpus Christi Regional Transportation Authority
Transit Asset Team Member	Director of Planning (Gordon Robinson)	Corpus Christi Regional Transportation Authority

CHAPTER 2 – ASSET PORTFOLIO

Below please find the Asset Portfolio Summary for the Corpus Christi Regional Transportation Authority:

Asset Portfolio Summary:

Asset Category	Total Number	Average Age
Facilities	13	12.5 years
Equipment/Non-Revenue	48	5 years
Rolling Stock	122	6.7 years

Asset Inventory Detail:

Oct-22

Stations	Term Rating	Completion Year	Age	Useful Life	Useful Life %
Staples Street Station	5	2016	6	40	85.00%
Robstown Station	4	2014	8	40	80.00%
Southside Station	3	2003	19	40	52.50%
Port/Ayers Station	2	1996	26	15	0.00%
Units	4		14.75	Avg Age	
Units < 3	1.00				
% < 3	25.00%				
Parking					
Bus - Bear Lane	5	2021	1	20	95.00%
Employees - Bear Lane	4	2015	7	20	65.00%
Staples Street Center Lot	4	2016	6	20	70.00%
Staples Street Center Off site	4	2017	5	20	75.00%
Units	4		4.75	Avg Age	
Units < 3	0				
% < 3	0.00%				
Buildings					
Staples Street Center	5	2016	6	40	85.00%
			6	Avg Age	
Maintenance					
Operations Center	3	2002	20	40	62.50%
Maintenance Shop	4	2010	12	40	82.50%
Fuel Island	3	1996	26	40	47.50%
Bus Wash	3	1996	26	40	47.50%
total units	5		18	Avg Age	
Units < 3	0				
% < 3	0				
Overall Average			12.5		

Active Non-Revenue Vehicle Inventory Listing

NON-REVENUE VEHICLES MAKE/MODEL	SIZE	VEHICLE NO	YEAR PUT IN SERVICE	ELIGIBLE FOR DISPOSITION	FTA GRANT USEFUL LIFE	FTA USEFUL LIFE BENCHMARK	AGE 2021	AGE 2022
CHEVY P/U - FLATBED		2402	1991	N/A	8	8	30	31
FORD F150 P/U	1/2 T	2925	2017	2025	8	8	4	5
FORD F150 P/U	1/2 T	2926	2017	2025	8	8	4	5
FORD F150 P/U	1/2 T	2927	2017	2025	8	8	4	5
FORD F150 P/U	1/2 T	2928	2017	2025	8	8	4	5
FORD F150 P/U	1/2 T	2929	2017	2025	8	8	4	5
FORD EXPEDITION XL	3/4 T	2931	2017	2025	8	8	4	5
FORD F250 P/U	3/4 T	2932	2017	2025	8	8	4	5
FORD F250 P/U	3/4 T	2933	2017	2025	8	8	4	5
FORD F250 P/U	3/4 T	2934	2017	2025	8	8	4	5
FORD F250 P/U	3/4 T	2935	2017	2025	8	8	4	5
FORD F350 P/U	3/4 T	2936	2017	2025	8	8	4	5
FORD F150 P/U	1/2 T	2937	2020	2028	8	8	1	2
Ford Escape Hybrid	4-DR	3148	2009	2017	8	8	12	13
Ford Escape Hybrid	4-DR	3149	2009	2017	8	8	12	13
Ford Escape Hybrid	4-DR	3152	2011	2019	8	8	10	11
Ford Escape Hybrid	4-DR	3153	2011	2019	8	8	10	11
Ford Focus	4-DR	3154	2012	2019	8	8	9	10
Ford Focus	4-DR	3155	2012	2019	8	8	9	10
Ford Focus	4-DR	3156	2012	2019	8	8	9	10
Ford Focus Electric	5-DR	3157	2016	2025	8	8	5	6
Ford Focus Electric	5-DR	3158	2016	2025	8	8	5	6
Ford Focus Electric	5-DR	3159	2016	2025	8	8	5	6
Ford Focus Electric	5-DR	3160	2016	2025	8	8	5	6
Ford Focus Electric	5-DR	3161	2016	2025	8	8	5	6
Ford Focus Electric	5-DR	3162	2016	2025	8	8	5	6
Ford Focus Electric	5-DR	3163	2016	2025	8	8	5	6
Ford Focus Electric	5-DR	3164	2016	2025	8	8	5	6
Ford Focus Electric	5-DR	3165	2016	2025	8	8	5	6
Ford Focus Electric	5-DR	3166	2016	2025	8	8	5	6
Ford Focus Electric	5-DR	3167	2016	2025	8	8	5	6
Ford Focus Electric	5-DR	3168	2016	2025	8	8	5	6
Ford Focus Electric	5-DR	3169	2016	2025	8	8	5	6
Ford Fusion	5-DR	4001	2020	2028	8	8	1	2
Escape SE FWD 4DR	5-DR	4002	2021	2029	8	8	0	1
Escape SE FWD 4DR	5-DR	4003	2021	2029	8	8	0	1
Chrysler Voyager	5-DR	4101	2021	2029	8	8	0	1
Chrysler Voyager	5-DR	4102	2021	2029	8	8	0	1
Explorer	5-DR	6008	2020	2028	8	14	1	2
Explorer	5-DR	6009	2020	2028	8	14	1	2
Explorer	5-DR	6010	2020	2028	8	14	1	2
Explorer	5-DR	6011	2020	2028	8	14	1	2
Explorer	5-DR	6012	2021	2029	8	14	0	1
Explorer	5-DR	6013	2021	2029	8	14	0	1
Explorer	5-DR	6014	2021	2029	8	14	0	1
Explorer	5-DR	6015	2021	2029	8	14	0	1
Explorer	5-DR	6016	2020	2028	8	14	1	2

Transit Asset Management Plan

Active Rolling Stock Vehicle Inventory Listing

MAKE/MODEL	SIZE	VEHICLE	Count on Jan 1, 2022	Year Put In Service	Eligible for Disposition	FTA Useful Life Benchmark (ULB)	ULB Age in 2022	ULB Age in 2023
Gillig Trolley	35'	97	1	2008	2021	13	14	15
Gillig Trolley	35'	98	1	2008	2021	13	14	15
Gillig Trolley	35'	99	1	2008	2021	13	14	15
Gillig Trolley	35'	101	1	2008	2021	13	14	15
GILLIG	35'	651	1	2010	2024	14	12	13
GILLIG	35'	652	1	2010	2024	14	12	13
GILLIG	35'	653	1	2010	2024	14	12	13
GILLIG BUS	40	715	1	2009	2023	14	13	14
GILLIG BUS	40'	716	1	2009	2023	14	13	14
GILLIG BUS	40'	717	1	2009	2023	14	13	14
GILLIG BUS	40'	718	1	2009	2023	14	13	14
GILLIG BUS	40'	719	1	2009	2023	14	13	14
GILLIG BUS	40'	720	1	2009	2023	14	13	14
GILLIG BUS	40'	721	1	2010	2024	14	12	13
GILLIG BUS	40'	722	1	2010	2024	14	12	13
GILLIG/ Low Floor	35'	901	1	2012	2026	14	10	11
GILLIG/ Low Floor	35'	902	1	2012	2026	14	10	11
GILLIG/ Low Floor	35'	903	1	2012	2026	14	10	11
GILLIG/ Low Floor	35'	904	1	2012	2026	14	10	11

Transit Asset Management Plan

MAKE/MODEL	SIZE	VEHICLE	Count on Jan 1, 2022	Year Put In Service	Eligible for Disposition	FTA Useful Life Benchmark (ULB)	ULB Age in 2022	ULB Age in 2023
GILLIG/ Low Floor	35'	905	1	2012	2026	14	10	11
GILLIG/ Low Floor	35'	906	1	2015	2029	14	7	8
GILLIG/ Low Floor	35'	907	1	2015	2029	14	7	8
GILLIG/ Low Floor	35'	908	1	2015	2029	14	7	8
GILLIG/ Low Floor	35'	909	1	2015	2029	14	7	8
GILLIG/ Low Floor	35'	910	1	2015	2029	14	7	8
GILLIG/ Low Floor	35'	911	1	2015	2029	14	7	8
GILLIG/ Low Floor	35'	912	1	2015	2029	14	7	8
GILLIG/ Low Floor	35'	913	1	2015	2029	14	7	8
GILLIG/ Low Floor	35'	914	1	2015	2029	14	7	8
GILLIG/ Low Floor	35'	915	1	2015	2029	14	7	8
GILLIG/ Low Floor	35'	916	1	2017	2031	14	5	6
GILLIG/ Low Floor	35'	917	1	2017	2031	14	5	6
GILLIG/ Low Floor	35'	918	1	2017	2031	14	5	6
GILLIG/ Low Floor	35'	919	1	2017	2031	14	5	6
GILLIG/ Low Floor	35'	920	1	2017	2031	14	5	6
GILLIG/ Low Floor	35'	921	1	2017	2031	14	5	6
GILLIG/ Low Floor	35'	922	1	2017	2031	14	5	6
GILLIG/ Low Floor	35'	923	1	2017	2031	14	5	6
GILLIG/ Low Floor - Not in Service	35'	924	1	2017	2031	14	5	6

Transit Asset Management Plan								
MAKE/MODEL	SIZE	VEHICLE	Count on Jan 1, 2022	Year Put In Service	Eligible for Disposition	FTA Useful Life Benchmark (ULB)	ULB Age in 2022	ULB Age in 2023
GILLIG/ Low Floor	35'	925	1	2017	2031	14	5	6
GILLIG/ Low Floor	35'	926	1	2017	2031	14	5	6
GILLIG/ Low Floor	40	1001	1	2012	2026	14	10	11
GILLIG/ Low Floor	40	1002	1	2012	2026	14	10	11
GILLIG/ Low Floor	40	1003	1	2012	2026	14	10	11
GILLIG/ Low Floor	40	1004	1	2012	2026	14	10	11
GILLIG/ Low Floor	40	1005	1	2012	2026	14	10	11
GILLIG/ Low Floor	40	1006	1	2015	2029	14	7	8
GILLIG/ Low Floor	40	1007	1	2015	2029	14	7	8
GILLIG/ Low Floor	40	1008	1	2015	2029	14	7	8
GILLIG/ Low Floor	40	1009	1	2015	2029	14	7	8
GILLIG/ Low Floor	40	1010	1	2015	2029	14	7	8
GILLIG/ Low Floor	40	1011	1	2015	2029	14	7	8
GILLIG/ Low Floor	40	1012	1	2015	2029	14	7	8
GILLIG/ Low Floor	40	1013	1	2015	2029	14	7	8
GILLIG/ Low Floor	40	1014	1	2015	2029	14	7	8
GILLIG/ Low Floor	40	1015	1	2015	2029	14	7	8
GILLIG/ Low Floor	40	1016	1	2015	2029	14	7	8
GILLIG/ Low Floor	40	1017	1	2015	2029	14	7	8
GILLIG/ Low Floor	40	1018	1	2015	2029	14	7	8

Transit Asset Management Plan								
MAKE/MODEL	SIZE	VEHICLE	Count on Jan 1, 2022	Year Put In Service	Eligible for Disposition	FTA Useful Life Benchmark (ULB)	ULB Age in 2022	ULB Age in 2023
GILLIG/ Low Floor	40	1019	1	2015	2029	14	7	8
GILLIG/ Low Floor	40	1020	1	2015	2029	14	7	8
GILLIG/ Low Floor	40	1021	1	2015	2029	14	7	8
GILLIG/ Low Floor	40	1022	1	2015	2029	14	7	8
GILLIG/ Low Floor	40	1023	1	2015	2029	14	7	8
GILLIG/ Low Floor	40	1024	1	2015	2029	14	7	8
ARBOC/SOM	26'	2025	1	2014	2024	10	8	9
ARBOC/SOM	26'	2026	1	2014	2024	10	8	9
ARBOC/SOM	26'	2027	1	2014	2024	10	8	9
ARBOC/SOM	26'	2028	1	2014	2024	10	8	9
ARBOC/SOM	26'	2029	1	2014	2024	10	8	9
ARBOC/SOM	26'	2031	1	2014	2024	10	8	9
ARBOC/SOM	26'	2032	1	2014	2024	10	8	9
ARBOC/SOM	26'	2035	1	2014	2024	10	8	9
ARBOC/SOM	26'	2036	1	2014	2024	10	8	9
ARBOC/SOM	26'	2038	1	2014	2024	10	8	9
ARBOC/SOM	26'	2039	1	2014	2024	10	8	9
ARBOC/SOM	26'	2040	1	2014	2024	10	8	9
ARBOC/SOM	26'	2041	1	2014	2024	10	8	9
ARBOC/SOM	26'	3008	1	2014	2024	10	8	9

Transit Asset Management Plan								
MAKE/MODEL	SIZE	VEHICLE	Count on Jan 1, 2022	Year Put In Service	Eligible for Disposition	FTA Useful Life Benchmark (ULB)	ULB Age in 2022	ULB Age in 2023
ARBOC/SOM	26'	3009	1	2015	2025	10	7	8
ARBOC/SOM	26'	3010	1	2015	2025	10	7	8
ARBOC/SOM	26'	3011	1	2015	2025	10	7	8
ARBOC/SOM	26'	3012	1	2015	2025	10	7	8
ARBOC/SOM-Spirit of Mobility 26	26'	3013	1	2017	2027	10	5	6
ARBOC/SOM-Spirit of Mobility 26	26'	3014	1	2017	2027	10	5	6
ARBOC/SOM-Spirit of Mobility 26	26'	3015	1	2017	2027	10	5	6
ARBOC/SOM-Spirit of Mobility 26	26'	3016	1	2017	2027	10	5	6
ARBOC/SOM-Spirit of Mobility 26	26'	3017	1	2017	2027	10	5	6
ARBOC/SOM-Spirit of Mobility 26	26'	3018	1	2017	2027	10	5	6
ARBOC/SOM-Spirit of Mobility 26	26'	3019	1	2017	2027	10	5	6
ARBOC/SOF-Spirit of Freedom	27'	3020	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3021	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3022	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3023	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3024	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3025	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3026	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3027	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3028	1	2020	2030	10	2	3

Transit Asset Management Plan								
MAKE/MODEL	SIZE	VEHICLE	Count on Jan 1, 2022	Year Put In Service	Eligible for Disposition	FTA Useful Life Benchmark (ULB)	ULB Age in 2022	ULB Age in 2023
ARBOC/SOF-Spirit of Freedom	27'	3029	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3030	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3031	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3032	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3033	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3034	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3035	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3036	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3037	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3038	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3039	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3040	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3041	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3042	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3043	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3044	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3045	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3046	1	2020	2030	10	2	3
ARBOC/SOF-Spirit of Freedom	27'	3047	1	2020	2030	10	2	3
FORD / ELDORADO NATL AEROTECH 240 TYPE III	25'	3592	1	2012	2022	10	10	11

Transit Asset Management Plan								
MAKE/MODEL	SIZE	VEHICLE	Count on Jan 1, 2022	Year Put In Service	Eligible for Disposition	FTA Useful Life Benchmark (ULB)	ULB Age in 2022	ULB Age in 2023
FORD / ELDORADO NATL AEROTECH 240 TYPE III	25'	3593	1	2012	2022	10	10	11
FORD / ELDORADO NATL AEROTECH 240 TYPE III	25'	3594	1	2012	2022	10	10	11
ARBOC/SOF-Spirit of Freedom	27'	3048	1	2020	2030	10	2	3

Transit Asset Management Plan					
Rolling Stock					
Vehicle Class	ULB (Years)	# of Units (12/31/17)	Number of Units Beyond ULB in 2022	Number of Units Beyond ULB in 2023	FY2022 Baseline Target % at or ULB
Bus/Trolleys	14/13	65	4	4	6.1%
Cutaways	8	57	0	3	0.00%
Total		122	4	7	3.2%

CHAPTER 3 – CONDITION ASSESSMENT

Performance Measures for Capital Assets

Non-revenue service vehicles: the performance measure for non-revenue, support service and maintenance vehicles is the percentage of vehicles that have met or exceeded their useful life benchmark.

Rolling stock: The performance measure for rolling stock is the percentage of revenue vehicles within a particular asset class that have either met or exceeded their useful life benchmark (providers can either use the useful life benchmarks established by FTA or one developed locally that takes into account local conditions and usage that is approved by FTA).

Facilities: The performance measure for facilities is the percentage of facilities within an asset class rated below condition 3 on the TERM scale.

Asset Condition

Equipment

Currently, there is no equipment over \$50,000 that is separate from the buildings/facilities.

Facilities

As outlined in the previous chapter, there are currently 13 facilities in our inventory. The average condition rating of these facilities is "Adequate" with a score from 3 to 3.9. This condition is in line with the initial parameters of the established performance measures of facilities having an average condition rating of "adequate" or better. None of the facilities have met or exceeded their ULB.

Rolling Stock

There are 132 vehicles within our rolling stock inventory. Currently the average condition of these vehicles is "Adequate" with a rating of 3 to 3.9.

Currently, 0% of the vehicles have met or exceed their ULB.

Asset Condition Summary

Asset Category	Count	Avg. Age
Equipment/Non Revenue Vehicles	48	5 years
Facilities	13	12.5 years
Rolling Stock	122	6.7 years

CHAPTER 4 – MANAGEMENT APPROACH

Decision Support

The Federal Transit Administration (FTA) funds, which are allocated to CCRTA, are crucial to the continued operation of public transportation services in the service area. There are several types of FTA grants that the CCRTA is eligible to apply for funding.

CCRTA utilizes two distinct paths in the distribution of funding. The first is the annual congressional appropriation. These are sustainable funds that are distributed annually by Congress through FTA. Capital funds are available for recipients and subrecipients to replace, rehabilitate, and purchase buses and bus related equipment and to construct bus-related facilities including technological changes or innovations to modify low or no emission vehicles or facilities.

The second path is CCRTA's "One-Time Application" grant process when the grant is announced. The funding for this application is comprised of excess funds above and beyond those necessary to sustain operations of eligible recipients. These funds are competitive grants and being selected for an award is highly regarded.

Process/Tool	Brief Description
5339 – Buses and Bus Facilities Program	Makes Federal resources available to States and designated recipients to replace, rehabilitate, and purchase buses and related equipment and to construct bus-related facilities including technological changes or innovations to modify low or no emission vehicles or facilities.
5307 – Formula Funds	Provides capital funding for agencies to replace, rehabilitate, stations/shelters/equipment and to purchase buses to support the continuation and expansion of public transportation services.

Investment Prioritization

CCRTA develops a listing of Program Priorities through the Capital Projects Budget every year, which helps guide in making recommendations to the CCRTA Board of Directors, and the public. Staff uses the following priorities, as well as established performance metrics, identified technical issues, safety concerns and needs of each department, and the amount of funding available to make initial recommendations for project award and level of funding. All recommendations made to FTA are at the discretion and subject to change by the CCRTA Board of Directors.

Replacement vehicles are prioritized based on whether or not the vehicle has met or exceeded its useful life. Further evaluation is done by taking into account the vehicle's condition, age, and mileage.

Risk Management

Risk	Mitigation Strategy
Pre- and/or Post-Trip Inspections not being conducted	Pre- and Post-Trip inspections to be conducted in compliance with applicable Federal and State requirements.
Scheduled Maintenance not being conducted	Adhere to preventive maintenance plan and/or minimum OEM standards.
Annual Vehicle Inspections not being conducted	Annual Vehicle Inspection to be conducted in compliance with applicable Federal and State requirements.
Outdated/expired equipment	Adhere to preventive maintenance plan and/or minimum OEM standards. Inspect during annual inspections.

Transit Asset Management Plan

Vehicle Failures/Malfunctions	Reviewed during repair assessment needs.
Vehicle Condition	Reviewed during regular Preventive Maintenance Inspections.
Age	Reviewed during annual inventory report.
Mileage	Reviewed during annual inventory report.

Maintenance Strategy

CCRTA adheres to their written vehicle maintenance programs to ensure that vehicles are maintained, at a minimum, in accordance with their manufacturer's maintenance and service guidelines.

Overhaul Strategy

When vehicles meet their mid-useful life an assessment is conducted by the CCRTA to determine the cost effectiveness of a vehicle overhaul vs. the replacement cost of the vehicle.

Disposal Strategy

CCRTA implements its own disposition procedures to ensure that vehicles are used until the end of their useful life. In the event that a vehicle must be disposed of before the end of its useful life, CCRTA will send a written request to FTA requesting disposal before the end of the vehicle's useful life, with an explanation of why the disposal is justified. CCRTA will determine which option is best for the Department from the options listed in FTA C 5010.1D, and inform the FTA of the preferred method and the reasoning behind it.

Titles are held by CCRTA until useful life is met and the estimated value is less than \$5,000, per remaining FTA interests over \$5,000. In the event of a systemic problem CCRTA can give permission to dispose of vehicles prior to the end of the useful life.

Rolling Stock

Disposal Type	Disposal Strategy
Auction Sale/Open Bid Sale	Follow local procedures for disposal as long as the process involves an open public bid or auction process. Sale proceeds must be retained in the transit program under which the vehicle was initially acquired and used to reduce the cost of the next vehicle purchase.
Non-profit (501.3C) Donation	Once an asset is ready for disposal and has gone through the open bid process, if it is not purchased then it may be donated to a non-profit.
Maintained as spare vehicle	Vehicle is maintained in a operable state in anticipation of immediate need to put in service.

Acquisition and Renewal Strategy

Keep the CCRTA revenue vehicle condition average rating at "Good" by the end of FFY 2018

- Dispose of vehicles that pose an irreparable unacceptable safety risk
- Prioritize the replacement of vehicles that fall within the "Poor" condition rating
- Preventive/Predictive Maintenance Inspection Program
- Site Review Program
- Risk Management Strategies

Prioritization Process for the Replacement of Vehicles

- Prioritize the replacement of vehicles that have exceeded their ULB
- Continue with Preventive Maintenance Strategies to extend ULB if needed

Transit Asset Management Plan

CHAPTER 5 – WORK PLANS & RESOURCES

Proposed Investments

Capital priorities are identified locally, based on policies and critical needs. Items ranked as high priority reflect the condition of the asset and where it is at on the Term Rating Scale. Further, project prioritization also takes into account estimated funding sources available to implement the proposed projects and can be linked to your Statewide Transportation Improvement Program and/or the Transportation Improvement Program.

The 2022 Proposed Capital Budget is listed below:

Project Name	Project Cost	Federal	Local
Bus Stop Shelter Amenities & Bus Shelters	\$ 4,182,112	\$ 4,182,112	\$ -
Cutaway Van Replacements (9 units)	2,433,510	2,068,484	365,027
Bus AVL Phase 2	971,500	777,200	194,300
ADA Bus Stop Improvements IX	500,000	400,000	100,000
Miscellaneous Concrete Infrastructure - Bus Pads	500,000	400,000	100,000
Relief/Support Vehicle Replacements	344,400	275,520	68,880
Document Management	151,173	-	151,173
Server and Storage Replacement	114,500	-	114,500
Security Camera Systems	109,815	87,852	21,963
Cummins CNG Powerplant with Allison Transmission Training Aid	85,000	68,000	17,000
Cisco Switches Replacement Phase 1	68,486	54,789	13,697
Large Sweeper Scrubber(Parking Lots)	49,500	-	49,500
High Lift Wheel Dolly	46,000	-	46,000
Industrial A/C Recovery Systems	45,000	-	45,000
BoardRoom Hardware Replacement	37,359	-	37,359
Air Brake Training Board	32,000	-	32,000
Diesel Pump Conversion to Unleaded	29,942	-	29,942
Simulation Control Module Training Board	23,500	-	23,500
Heavy Duty Vertical Contour Band Saw	22,000	-	22,000
Heavy Duty Foldable Vehicle Lift	18,000	-	18,000
Network Firewall Replacement	18,000	-	18,000
Sand Blaster Cabinet	15,000	-	15,000
Golf Cart	14,500	-	14,500
4 X 2 Electric Utility Vehicle	13,500	-	13,500
Lift Crane (for the removal of concrete benches)	13,000	-	13,000
Ride-On Micro-Scrubber	10,500	-	10,500
Dual Hose Unleaded Dispenser	10,465	-	10,465
Heavy Duty Mig Welder	9,500	-	9,500
Preventive Maintenance * (included in operating budget)	1,000,000	800,000	200,000
Total Projects 29	\$ 10,868,262	\$ 9,113,957	\$ 1,754,305

Capital Investment Resources

CCRTA's Website: <http://ccrta.org>

- Board of Directors
- Advisory Groups:
 - Regional Committee on Accessible Transportation (RCAT)
- Grants:
 - Capital Grant Program
 - State of Good Repair
 - Competitive Grants
- Performance
 - Safety
 - Age
 - Condition
 - Miles

Federal Transit Administration: www.transit.dot.gov

APPENDIX 2

FORM TO USE TO PLACE AN ASSET IN SERVICE

Form Number:

A pre-numbered form will be issued by the Finance Department upon receiving an email request. Complete this form 5 business days before placing the asset in service to allow the Finance Department time to verify the information and tag the asset. The Procurement Director, DBE/EEO Compliance Officer, and Managing Director of Administration must be included in all communications during this process.

ITEM	
Unit Number	
Identification Number or Serial Number	
Make	
Model	
Acquisition Date (Provided by Finance)	
Is this a Revenue Vehicle?	
Asset Type (Provided by Finance)	
Description	
Odometer Reading	
Date & Time Placed in Service	
Location of Asset	
Department Assigned To	
Condition	
New/Used	
Estimated Life of Asset	
Asset Tag Number(To be assigned by FD)	
TML ID# (Provided by FD)	
Does this unit replace another unit? If so Unit #	

Signature of Director _____ Date _____

FINANCE DEPARTMENT

Date entered into Fleet Net Asset Module _____ BY _____

Data entry reviewed and approved by _____

Cc: Procurement Department DBE/EEO Compliance Officer

APPENDIX 3

CCRTA FIXED ASSET RETIREMENT/DISPOSAL FORM

Form Number: R2018-001

A pre-numbered form will be issued by the Finance Department upon receiving an email request. Complete this form 15 business days in advance of the event to allow the Finance Department time to verify the information and conduct an on-site assessment. The Procurement Director, DBE/EEO Compliance Officer, and Managing Director of Administration must be included in all communications during this process.

This form is to be used to identify an asset that needs to be removed from active service for a variety of reasons whether stolen, damaged, replaced, lost or disposed. There is a critical distinction between the retirement and the disposal of an asset. An asset that is no longer being used but remains in our possession or the last know location was in the possession of the Agency falls into the Agency's definition of retirement.

The physical disposal of an asset requires transfer of ownership and an asset should not be considered disposed until, and unless, there is a positive transfer of custody established. Salvage value which is the estimated worth of an asset at the end of its useful life should not be confused with cannibalizing which refers to the process of removing parts and or equipment in order to use them in another.

Description	
Department	
Reason for Asset Removal	
Unit Number	
VIN# / Serial Number	
Make/Model	
RTA License Number	
TML ID# (Provided by Finance)	
Description	
Odometer Reading	
Size/Seating/Fleet	
Lift?	
Type of Fuel	
Tires/Lease if so have they been replaced	
In Service Date (provided by FD)	
Is Cannibalizing being considered?	
Funding Source (provided by FD)	
Useful Life of Asset (provided by FD)	
Remaining Life of Asset(provided by FD)	
Remove Genfare from Bus (if applicable)?	
Appraised Value	
Date of Disposal	
Method Used to Determine its Fair Value	
Disposal Sale Price	
FTA Prior Approval	
CEO Prior Approval/Board Notification	

Signature of Director _____ Date _____
Signature of DBE/EEO Compliance Officer _____ Date _____
Signature of Procurement Director _____ Date _____
Signature of Managing Director of Administration _____ Date _____
Signature of CEO: _____ Date _____